Buckhorn Mountain Project Mill and Tailings Disposal Facility Cultural Resource Survey

By:
David A. Harder

Plateau Investigations

September 2003

Buckhorn Mountain Project Mill and Tailings Disposal Facility Cultural Resource Survey

Prepared for:
Crown Resources
624 Central Avenue
Oroville WA 98844

By:
David A. Harder

Plateau Investigations
P.O. Box 714
Pullman, Washington 99163
509-332-3830

September 2003

ABSTRACT

Buckhorn Mountain Project Mill and Tailings Disposal Facility Cultural Resource Survey

In conjunction with an underground gold mine on Buckhorn Mountain, Crown Resources is proposing to use privately owned property that lies south of Chesaw, Washington as a mill and tailings disposal facility (TDF). This project would result in the transport of ore from the mine site to the proposed work location for milling and tailing disposal. A survey of 129 acres, known as the Project Area, was undertaken to determine whether adverse affects to any cultural resources would be caused by the proposed construction of an related facilities and the subsequent reclamation. The property was surveyed using standard archaeological reconnaissance methods. No cultural materials were observed during the ground survey. There is no indication that any cultural resources will suffer adverse affects by the proposed project.

KEY INFORMATION

PROJECT

Buckhorn Mountain Project Mill and Tailings Disposal Facility Cultural Resource Survey

LOCATION

Chesaw, Washington

USGS QUADS

Chesaw, Washington 7.5 minute, 1988

LEGAL LOCATION OF PROJECT

T39N, R30E, Section 4

PROJECT DATA

0 Previously recorded cultural resources
0 New cultural resources located and/or recorded

AUTHORS

David A. Harder, M.A.

PROJECT UNDERTAKEN AND REPORT PREPARED FOR

Crown Resources Corporation, Oroville, Washington

FIELD NOTE DISPOSITION

Archived at the office of: Plateau Investigations, Pullman WA 99163

PRINCIPAL INVESTIGATOR

David A. Harder, M.A.

DATE

September 2003

CERTIFICATION OF RESULTS

I certify that this investigation was conducted and documented according to Secretary of Interior's Standards and guidelines and that the report is complete and accurate to the best of my knowledge.

_____ _____

Signature of Reporter Date

TABLE OF CONTENTS

LIST OF FIGURES

PROJECT DESCRIPTION

Crown Resources Corporation (Crown) proposes to develop an underground gold mine on Buckhorn Mountain in the Myers Creek mining district, Okanogan County, in north-central Washington. The Buckhorn Mt. deposit was discovered by Crown exploration geologists in 1988 and further delineated by Battle Mountain Gold Corporation (BMG) during the period 1990 to 1992. As part of the mine proposal an off site (private land) mill and tailings disposal facility (TDF) would be constructed at the site located approximately two miles south of Chesaw. Ore from the mine site on Buckhorn Mountain would be transported to the mill and TDF location by highway legal haul trucks. Plateau Investigations was retained by Crown Resources to perform a baseline cultural resource survey on the site of the future mill facility and TDF. The area surveyed by Plateau Investigations will hereafter be referred to as the Project Area.

The actual area of disturbance for the mill and TDF is approximately 90 acres however; the Project Area was expanded to cover outlying areas and consisted of a total of 129 acres. It lies within Section 4 of Township 39 North, Range 30 East, Willamette Meridian. The Project Area is irregularly shaped and is shown in Figure 2. The Project Area property is either owned or under option by Crown Resources Corporation.

The area of potential effect (APE) is the physical property of the proposed project. In addition to the physical APE, a less tangible APE should be considered prior to implementation of any project, therefor the aesthetic impacts of this project will also be discussed.

Figure 1. Project location.

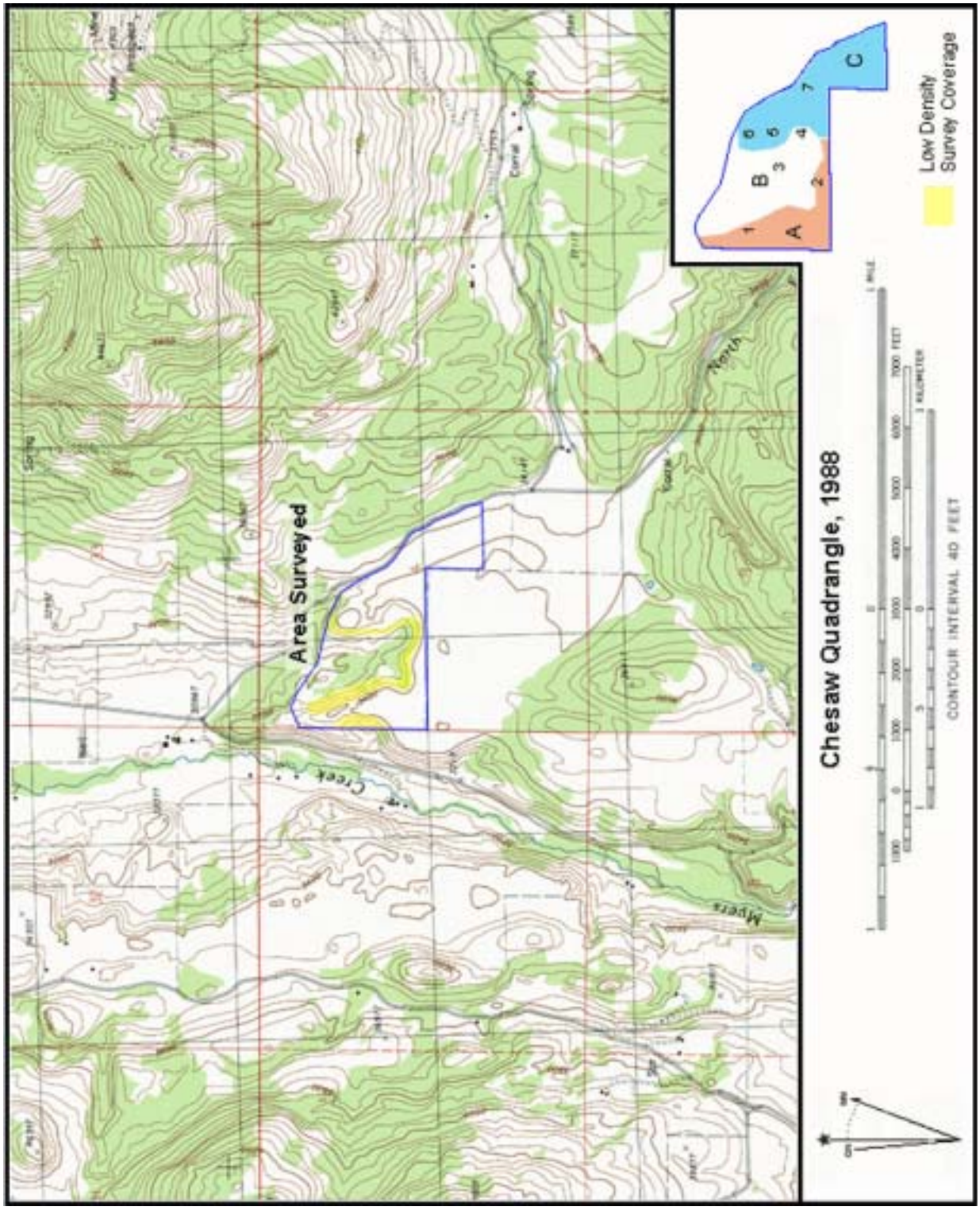

Figure 2. Crown Resources Project Area topographical map.

STATEMENT OF OBJECTIVES

Cultural survey of the Project Area is intended to identify and evaluate potential historic properties within the APE. The pre-field research and field survey were designed to locate and identify any cultural properties located in the APE. Several sections of this report (i.e. Location and General Environmental Setting, Previous Archaeological Research, Regional Prehistory and History, Traditional Cultural Properties, Expected Properties) are intended to provide context and aid in the evaluation process in the event that cultural resources are located on the Project Area or if Traditional Cultural Properties are identified that could be effected by the Crown Resources project. In addition, fieldwork procedures are designed to delineate site boundaries and gather information regarding depth and context of archaeological deposits if any are located within the Project Area.

LOCATION AND GENERAL ENVIRONMENTAL SETTING

The town of Chesaw is located in the Okanogan Highlands and is approximately 17 miles east of Oroville, Washington and the Highway 97 corridor. Highway 97 marks the Okanogan Trench and is home to several nearby cities with larger populations and increased services including Oroville as well as Tonasket, Omak, and Okanogan. The Okanogan Trench is a north-south trending valley that reaches from within Canada to the Columbia River. The North Cascades rise to the west of the trench and the Okanogan Highlands rise to the east. The predominate parent materials in the region are gneisses, schists, and granites. The Okanogan Trench and Okanogan Highlands were overlain and sculpted by glaciers during the last ice age. Following the recession of glaciers, these regions were subject to deposition of till and the effects of lacustrine and fluvial deposition and activity (Alt and Hyndman 1984:82-90). Glaciation and flood plain development in the region indicates that sediments are young enough to contain archaeological sites.

This region is east of the Pacific Crest and is subject to the rainshadow effect. The flood plains and valleys get relatively little precipitation, about 10 to 15 inches per year. None-the-less, as the topography rises the vegetation regime reflects a rise in precipitation. The flood plain of the Okanogan River is within the *Artemisia tridentata - Agropyron* climatic climax vegetation zone. This indicates that vegetation in an undisturbed context should consist predominately of Mountain Big Sagebrush (*Artemisia tridentata*) and Bluebunch Wheatgrass (*Agropyron spicatum*). Other grasses such as Needlegrasses (*Stipa comata* and *S. thurberiana*), and Bottlebrush Squirreltail (*Sitanion hystrix*) may also be present (Daubenmire 1988). Cottonwood (*Populus trichocarpa*), elm (*Elmnus* spp.), and willow (*Salix* spp.) are present along streams.

As one withdraws from the river, the topography rises. This increased elevation yields an increase in effective moisture and provides a vegetation regime of dispersed Ponderosa pines

(*Pinus ponderosa*) in association with Bluebunch Wheatgrass. Forest habitats to the east and west of the Project Area contain Ponderosa pine, Douglas fir (*Pseudotsuga menziesii*), and Larch (*Larix occidentalis*) in association with grassy and increasingly shrubby understories and isolated groves of Quacking Aspen (*Populus tremuloides*) (Daubenmire and Daubenmire 1968). The Project Area lies in the highlands amongst a complex mosaic of localized vegetation and environmental regimes. The Project Area includes two primary vegetative regimes; the higher ground is open grassland that includes bunch grasses, weeds, and feral cereal varieties that are indicative of past farming activities and recent grazing. The lower, protected areas include evergreen trees such Ponderosa pine and Larch or Tamarack underlain by snowberry as well as isolated Quaking Aspen groves.

The region within which the Project Area lies contains an abundance of life. The region is within the Canadian Life zone as defined by Merriam in 1892 (Dalquest 1948:27) and many species of animals are presently available. It is likely, though, that Native Americans had access to a larger variety of creatures during the past. The following lists a few of the more discernible creatures that may have been available to aboriginal populations in the past; elk (*Cervus canadensis*), mule deer (*Odocoileus hemionus*), mountain goats (*Oreamnos americanus*), bighorn sheep (*Ovis canadensis*), black bear (*Ursus americanus*), racoon (*Procyon lotor*), marten (*Martes americana*), fisher (*Martes pennanti*), shorttail weasel (*Mustela erminea*), longtail weasel (*Mustela frenata*), mink (*Mustela vison*), striped skunk (*Mephitis mephitis*), badger (*Taxidea taxus*), river otter (*Lutra canadensis),* coyote (*Canis latrans*), red fox (*Vulpes fulva*), cougar/mountain lyon (*Felis concolor*), lynx (*Lynx canadensis),* bobcat (*Lynx rufus*), hoary marmot (*Marmota caligata*), golden-mantled squirrel (*Citellus lateralis*), ground squirrels (*Citellus* sp.), northern flying squirrel (*Glaucomys sabrinus*), red squirrel (*Tamiasciurus hudsonicus*), bushytail woodrats (*Neotoma cinerea*), porcupine (*Erethizon dorsatum*), snowshoe hare (*Lepus americanus*), and possibly cottontail (*Sylvilagus nuttalli*). Several other species may have been present in the region in the past such as wolverine (*Gulo luscus*), wolves (*Canis lupus*), grizzly bear (*Ursus horribilis*), and even the occasional bison (*Bison bison*) may have been available prehistorically (Dalquest 1948; Burt and Grossenheider 1961).

According to Lothson (1977) several species of fish were available in the region (especially along the major drainages) such as: sturgeon (*Acipenser*), whitefish (*Prosopium*), suckers (*Pantosteus, Catostomus*), bullheads (*Cottus*) and anadromous fish such as salmon (*Oncorhynchus* spp.) and steelhead (*Salmo gairdnerii*).

Many types of fowl and game may also have been available in the region in the past including: Swarth blue grouse (*Dendragapus obscurus pallidus*), Columbian ruffed grouse (*Bonasa umbellus affinis*), Columbian sharp-tailed grouse (*Pedioecetes phasianellus*), western sage grouse (*Centrocercus urophasianus phaios*), mallard duck (*Anas platyrhynchos platyrhynchos*), western

harlequin duck (*Histrionicus histrionicus pacificus*), American common merganser (*Mergus merganser americanus*), the lesser snow goose (*Chen hyperborea hyperborea*), and the Great Basin Canada goose or "honker" (*Branta canadensis moffitti*). Seasonally available birds such as Gadwall (*Anas strepera*), wood duck (*Aix sponsa*), redhead (*Aythya americana*) and the northern ruddy duck (*Oxjura jamaicensis rubida*) reside in the region in the summer. Winter game birds include canvasback (*Aythya valisineria*) and American greater scaup (*Aythya marila nearctica*) (Lothson 1977).

The creatures listed above are not necessarily currently present or available in or adjacent to the Project Area. These lists are provided merely as a list of resources that may have played a role in aboriginal use, settlement, and travel patterns in relation to the Project Area. A wildlife survey for the Project Area has been done and provides an authoritative survey and review of the wildlife present (Boyle 2003).

Even though the region is in the rain shadow of the Cascade Mountains, the valleys yield an abundance of crops due to irrigation. The average annual rainfall recorded at the nearest weather stations, Chesaw and Irene Mountain Wauconda, are 14.04 and 14.45 inches respectively. The average seasonal temperatures recorded at the Chesaw station are 22.5^{o} F in winter and 58.3^{o} F. in the summer. Extreme temperatures of -33^{o} F and 97^{o} F have been recorded at the same station (Western Regional Climate Center). Although the nearby Okanogan Trench provides agreeable conditions for tree fruit, grain, alfalfa, and other cash crops, the climate and geography around the Project Area are less agreeable. This region is supported by hay, livestock, logging, and mining operations.

PRE-FIELD RESEARCH

Pre-field research consisted initially of a file search performed at the Washington State Historic Preservation Office (SHPO) in Olympia, Washington. The file search was performed by Jan Fluter of ArchiSearch on August 4, 2003. Topographic maps and other sources of information on file at the SHPO were consulted to identify any known cultural resources. This search allows identification of previously recorded historic and archaeological resources within or near the Project Area's APE.

In addition, available survey and overview reports were consulted as were ethnographic accounts of the region. A review of ethnographies was done to help identify any known Traditional Cultural Properties.

PREVIOUS ARCHAEOLOGICAL RESEARCH

Previous archaeological investigations in the region have mostly taken place as the result of Grand Coulee Dam, Wells Dam, Chief Joseph Dam and other reservoir projects. Douglas Osborne (1949) reported on the findings of the Smithsonian River Basin Survey work done prior to construction of Chief Joseph Dam. In 1975, additional survey and archaeological testing was done by the Washington Archaeological Research Center (WARC) at Washington State University (WSU). The Office of Public Archaeology at the University of Washington conducted archaeological survey and testing behind Chief Joseph Dam in the 1980's. An overview for the Tonasket Planning Unit of the Okanogan National Forest was prepared in 1978 (Uebelacker 1978). This was a review of previous archaeological work in the Okanogan Highlands that resulted in recommendations to increase the efforts of inventory and other archaeological investigations (Uebelacker 1978:113-114).

Several smaller undertakings have been done along the Okanogan River. The construction of flood control levees in Oroville by the U.S. Army Corps of Engineers prompted survey and testing of two sites that were then established to be not significant (Lothson 1977). A reconnaissance of a gravel pit site and a gravel stockpile site was undertaken for the Washington State Department of Transportation in the summer of 1980 northeast of Oroville where two prehistoric cairns were located and recorded (Eller 1980).

In 1986 an aboriginal cemetery called *Sntl´exnwenewixwtn* was disturbed during construction of the East Osoyoos extension of the Oroville-Tonasket Unit Extension. Archaeological excavation at the site recovered eight skeletons from four adult males, one adult female, two teenage females, and a 2 to 4 year old child of undetermined sex. Three of the men and the two teenage females died of multiple wounds caused by arrow, club, and spear. The child's cause of death was undetermined although it had been included in a grave with three of the homicide victims (Chatters and Zweifel 1987).

Archaeologists tested the location of a proposed pumping station settling pond adjacent to the Okanogan River known as the Ellisford site. The site was determined to be a field camp resulting from multiple occupations and was not eligible for inclusion on the National Register of Historic Places (Reid 1990:43). Although this site provided little additional understanding of the regional settlement system, it did provide management information. This excavation showed that buried soils and volcanic tephra are present in the region and can be used as time diagnostic markers. It also demonstrated that deeply buried cultural deposits may be present while not being well represented on the ground surface (Reid 1990:42).

In 1996 a Traditional Cultural Properties (TCP) study was done of the Crown Jewel site on Buckhorn Mountain (Hicks 1996). The TCP study consisted of an investigation of existing

plant communities on the Battle Mountain site which included the inventory of native and non-native species. This information would then be used to discuss the traditional resources and as a beginning point for discussions regarding the other traditional uses of the landscape. The TCP survey found that few undisturbed areas remained, though, due to road construction, fire suppression, logging, and mining efforts (Hicks 1996).

REGIONAL PREHISTORY AND HISTORY

The Project Area is within the Plateau culture area which corresponds roughly to the geographic region drained by the Fraser, Columbia, and Snake rivers. The Plateau culture area is bordered on the west by the Cascade Mountains and on the east by the Rocky Mountains. The northern border of the culture area is in Canada where the Plateau culture area gives way to Arctic culture patterns. The southern portion of the Plateau culture area mixes gradually with the Great Basin culture area.

No archaeological investigations in the region surrounding the Project Area have been done with the intent of identifying the cultural sequence. None-the-less, the cultural chronology is available for the Okanogans, although it is as yet poorly understood. In general, settlement patterns of the region are believed to have followed the same trends as elsewhere in the Columbia Plateau. A cultural chronology provides a time line describing the adaptations, material culture, subsistence, and sometimes settlement patterns of the people who inhabited a specific area. Following is a brief overview of the chronological model for the region.

Clovis Occupation The earliest evidence for human occupation in Washington State was identified during construction of an irrigation pipeline in East Wenatchee. What came to be known as the Ritchey-Roberts Clovis Cache is dated from 11,500 to 11,000 years before present (B.P.). It is the only site containing Clovis culture deposits in Washington that has been excavated under controlled circumstances (Mehringer 1989). Whether human occupation of the Okanogans began this early is unknown. Sites of this early age generally tend to be discrete and difficult to find.

Okanogan Phase The first inhabitants of the region followed the recession of the glaciers about 12,000 years ago (Alt and Hyndman 1984:20) and left very few indications of their presence. Their material culture remains congruent until about 6,000 years before present (B.P.) and is placed into the Okanogan Phase. Projectile points used were either leaf-shaped and/or stemmed, and flake tools were also utilized. The favored raw material for stone tool manufacture was basalt, and river mussel is the only resource known to have been utilized (Pokotylo and Mitchell 1998:94). These people were probably broad spectrum foragers that depended upon plant and animal resources in a large territory that covered the range of topographic settings.

Indian Dan Phase The Indian Dan Phase dates from 6,000 to 3,000 B.P. River mussels were still used, but the known inventory of faunal resources now includes fish and un-designated land mammals. Large basal-notched projectile points are the hallmark artifact of this phase, however leaf-shaped projectile points and flake tools are still in use. Earth ovens, pestles, and milling stones indicate that root resources were exploited (Pokotylo and Mitchell 1998:94).

Chiliwist Phase The Chiliwist Phase dates from 3,000 to 900 B.P. During this phase, settlement patterns change noticeably. Semi-subterranean pit houses came into use at this time as shown by the presence of deep, steep-walled features (known as housepits) which are often found in small clusters. Leaf-shaped projectile points are still in use as are basal-notched stemmed points with barbs. Basalt is no longer the most prominent material used for stone tool manufacture. Late in this phase projectile points with narrow necks are introduced, indicating the establishment of bow and arrow technology. Also in the archaeological record for this phase are microblades, milling stones, bone tools, and ground stone celts. Deer, elk, and mountain sheep were utilized and the people continued to use mussel and salmon (Pokotylo and Mitchell 1998:94).

The use of pithouses suggests a settlement pattern that includes a sedentary period during the coldest part of the year. These people were probably semi-sedentary hunter-gather-fishers that relied upon delayed consumption of seasonally abundant resources. The shift may have been brought about by the intensification of root crops (Ames and Marshall 1980) or the desire to control access to critical resources (Lohse and Sammons-Lohse 1986).

Cassimer Bar Phase The Cassimer Bar Phase dates from 900 B.P. until the time of contact between aboriginal groups and Euro-Americans. Small corner-notched projectile points were in use as were toggling harpoons made of bone. The harpoons were used for procuring fish. Carved steatite objects and decorated stone and bone artifacts indicate an increase in social complexity. Housepit styles change slightly to a less robust design, and the use of mat lodges becomes apparent. Fish, mussels, and large ungulates are the prevalent resources used (Pokotylo and Mitchell 1998:94).

Ethnography Following is a brief summary of the ethnography of the Columbia Plateau, although it is much more complex with a wider cultural diversity than what is laid out here. Ethnographic studies by Verne F. Ray (1933, 1939, 1942), Allan H. Smith (1988), Angelo Anastasio (1972), and of course Franz Boas and James Teit (1930) offer the reader a more thorough examination of the native cultures.

Ethnographically, the peoples of the Plateau lived in an egalitarian society with little or no slavery or caste systems. Their villages were autonomous and their leaders influenced others

with their charisma, persuasive words, or heroic actions. In the winter the people lived along the river in earth or mat lodges at semi-permanent villages. Their winter villages were located in a relatively warm location which may have protected them from the harsh elements. Their earth lodges were semi-subterranean (Ray 1939:135). A hole was dug in the earth and a pole frame was built over the pit and it was covered with mats and brush and finally with earth to insulate it. Mat lodges were also built and used as lodging year round. They consisted of a pole frame with a mat covering and were probably easily moved to a new location.

Winter villages were occupied during the coldest months of the year. People probably settled in for the winter in mid- or late-October. During the next four or five months they relied upon stored foods and any game that could be taken. In early spring, winter supplies began to dwindle and people began making forays to gather emergent root crops (Nelson 1973). Spring, summer, and fall hunting and gathering took place at areas away from the winter villages as did berry collecting, root gathering, and processing. Task groups often went to specific areas to hunt, to quarry toolstone, collect berries, or to gather other resources such as tules to make mats (Aikens 1993:90). Salmon runs take place at predictable times of the year and provided a valuable resource for immediate use and to store for winter provisions (Schalk 1977). By the end of summer, reserves of dried salmon and prepared roots were stocked for winter.

Historic Period Contact with peoples on the west coast of the continent were well established by the end of the eighteenth century by British, Spanish, and Russian trading vessels that made regular visits to the coastline. These trading expeditions began the first contact between aboriginal groups and outside cultures. The historic record of the area, though, really begins when Lewis and Clark journeyed through the region in 1805. Although they weren't near the Project Area, their travels foreshadowed the emanate changes. The region was soon traversed and explored by trappers, fur traders, and missionaries. Trappers from the Canadian owned Northwest Company made their way into the region in 1809 and built Spokane House. In 1811 Fort Okanogan was built by the American owned Pacific Fur Company. These two companies struggled against one another for fur trade business until 1812 when the Pacific Fur Company holdings were sold to the Northwest Company. Soon the London based Hudson's Bay Company and the Northwest Company were amalgamated under the British crown. When it became clear in the mid 1820's that Spokane House was struggling to make a profit, the company moved operations to a new fort near Kettle Falls and named it Fort Colvile. It became the most important post between the Cascade and Rocky mountains. The post provided grain to other forts in the northwest and was an important fur trading depot. Fort Colvile operated for 46 years (Bohm and Holstine 1983; Beckham 1998).

Because of increasing numbers of emigrants, the Oregon Territory was officially established in 1848. By 1850, nearly 12,000 emigrants had passed through the Plateau region along the Oregon

Trail (Walker and Sprague 1998; Beckham 1998). With the establishment of the Oregon Territory, federal involvement proliferated. Treaties between Indian tribes and the new state and federal governments were soon underway. These treaties were difficult to maintain in light of the rapid influx of miners following the several "rushes" and settlers who were eager for property. The unintentional introduction of disease and other stresses introduced by the new settlers caused mistrust and eventually, warfare. Several battles took place in the Oregon Territory between 1855 and 1858. During this time, efforts were made to limit the incursion of emigrants and others into Indian territories. Volunteer militias, though, attacked indiscriminately and fueled the problems. The unrest culminated with Colonel Edward J. Steptoe's ruthless campaign in 1858 that resulted in the executions and murders of sixteen Indians including a Yakama chief named Owhi and his son, Qualchan (Beckham 1998).

In 1859 the U.S. Army moved forces from the Yakima Valley to the Colville area. A post, initially named "Harney's Depot" was set up northeast of the present city of Colville. It quickly became known as Fort Colville. This military post was distinguished from the fur trading post by its "American" spelling. Fort Colville provided a base for boundary commissioners who surveyed the American/Canadian border and the Army was responsible for moving Indians onto reservation land. The post was abandoned for Fort Spokane in 1885 (Bohm and Holstine 1983).

Settlement of the region by non-Indians began as early as 1856 and continued in a relatively slow fashion as pioneers and a few government officials settled in the region through 1885. In 1886 the Moses Reservation was opened to occupation by non-Indians. The region was quickly deluged by miners, stockmen, lumbermen, farmers, merchants, and others until Okanogan County's population reached over 1,500 people in 1890 and almost 13,000 in 1910 (Wilson 1990). With the increasing populations and movements of goods, transportation became a major business in the valley. Through this era of population growth, transportation alternatives changed from walking to horses and stage lines. A multitude of ferries serviced the many rivers and creeks beginning as early as 1865. Stern wheeled steam ships plied the larger rivers when river flow allowed. The City of Oroville traces its beginnings to a store and restaurant named *Oro* that was built by Robert Allison in 1891. The business prospered and drew in other like minded people until a post office was established in 1893 and decisively named the settlement Oroville.

Beginning in 1896 when the north half of the Colville Reservation was opened to mining, a large, undetermined number of miners moved into the region to prospect. With this came the establishment of many towns, communication networks, cabins, mining related sites, and etc. The town of Chesaw is named for a Chinese miner, named Chee Saw, that settled on the location after the placer workings he was on were exhausted. He married an Indian woman and took up farming (Wilson 1990:118; Phillips 1990:26).

Since the first flush at the end of the 18th century, mining has remained a prime motivating factor in the Okanogans. Twenty-three precious and industrial metals have been identified in the Okanogans including gold, silver, copper, chromium, molybdenum, titanium, and zinc. Other economically attractive non-metallic minerals such as gypsum and limestone are also present in the region (Wilson 1990:119).

In 1900 the north half of the Colville Reservation was opened to homesteading. According to Uebelacker (1978:84), all land that was attractive to homesteading was settled by 1910. This rapid settlement was facilitated by the creation of roads and settlements by miners in the region. Lumber harvesting became more prevalent as mining and homesteading increased. Portable sawmills were common and could be moved to locations that were advantageous for both harvesting and providing wood (Uebelacker 1978:93-95).

Eventually, railroads were established in the region and the Great Northern Rail line reached Oroville from Molson in 1907, although it wasn't until 1913 that the line between Oroville and Pateros was operable (Wilson 1990). The economy and population quickly grew with this increase in transportation. Fruit and grain crops as well as ranching became major economic concerns in addition to the mining and logging.

The Colville Reservation

The Colville Reservation was first established in 1872. The tribes of the territory were originally provided with property north of Spokane on April 9, 1872. The reservation was bounded, generally, by the Columbia, Spokane, and Pend Oreille rivers and this property was soon "exchanged" for property west of the original reservation which is bounded by the Columbia River on the south and east and by the Okanogan River on the west. The north boundary was the "British possession." This included 2.9 million acres of property. Twenty years later, the north half of the Colville Reservation (totaling 1.5 million acres) was "restored" to public domain and opened for settlement by non-Indians in 1892. At the time of "restoration" to public use, hundreds of allotments were provide to those Indians that had settled. In 1896 mineral rights in the northern half was opened to the general public and in 1900 it was opened to settlement under the homestead act. The Project Area is within this north portion that was "restored."

Meanwhile, the Moses Reservation was established in 1879 west of the Colville Reservation. In 1883 an agreement was made between the United States Government and the people of the Moses reservation and the Moses band and others moved to the Colville Reservation which was, as stated above, subsequently reduced in 1892.

When these properties were removed from the Reservation system, and land was opened for use by all non-Indians, 697 allotments of 80 acres were granted to Indian people who had already

settled within this northern part of the Colville Reservation (Uebelacker 1978:76). Indian allotments are lands that have been granted to an individual for their own benefit, and are held in legal trust by the United States for the named Indian as a trust Patent. It is then possible to transfer an allotment to an individual via a fee patent in either an unrestricted or restricted manner. Allotments transferred to the individual via an unrestricted patent are then indistinguishable from other privately owned property. Restricted patents may vary in their restrictions from use, transferability, mineral rights, and etc. Thus, allotments in the former north half of the Colville Reservation may remain as trust Patents or may have been conveyed to Fee Patents. Either type of patent may have restrictions.

As of 1978, about 100 of the original 697 allotments remained in Indian ownership (Uebelacker 1978:76). Allotments are not typically marked on USGS topographic maps. In the former north half of the Colville Reservation, numerous parcels are marked as "Indian Allotment," though. According to Ron Scherler of the BLM Cadastral Survey in Portland, Oregon, these parcels were allotted prior to the establishment of the Rectangular Survey System and have since been granted fee simple patents (Crown Resources internal documents). These properties, of which there are seven within 10 miles of the Project Area, remain marked simply to help identify the sequence of title for the parcel.

Immediately south and west of the Project Area are two allotments. The two 80 acre allotments are N½ SW¼, Section 4 and S½ SW¼, Section 4. These allotments were patented to Andrew Joseph and Mary Joseph (relationship unknown), respectively. These are restricted Patents that are designated as "3 generation" allotments. Presumably, this means that the property must remain in trust through three generations before it may be converted to a Fee Simple Patent. Andrew Joseph (grandson to Andrew Joseph) currently leases this property for seasonal grazing.

TRADITIONAL CULTURAL PROPERTIES

Traditional Cultural Properties (TCP) are important for the "role the property plays in a community's historically rooted beliefs, customs and practices" (*National Register Bulletin 38*). Although these properties can be difficult to identify and evaluate, an initial search of pertinent publications can be helpful toward identifying the types of properties that may be expected. The *National Register Bulletin 38* goes on to state that "examples of properties possessing such significance include:

- a location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world;
- a rural community whose organization, buildings and structures, or patterns of land use reflect the cultural traditions valued by its long-term residents;

- an urban neighborhood that is the traditional home of a particular cultural group, and that reflects its beliefs and practices;
- a location where Native American religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice; and
- a location where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historic identity."

Boas and Teit (1930) identify the region around the project as the traditional territory of the Okanogan tribes. The Project Area lies near the border of the traditional territories of the Sinkaietk (or Southern Okanogan) and the Northern Okanagan peoples. The Okanogan River was central to the Sinkaietk's territory. The Northern Okanagan's villages were located along Okanogan Lake and the Okanogan River at locations north of the Canadian border. Both groups were informally affiliated and associated with neighboring tribes such as the Nespelem, Colville, and Sanpoil (Spier 1936). The Sinkaietk territory encompassed the Okanogan River from Tonasket to its mouth. From the mouth of the Okanogan River, their territory continued upstream on the Columbia to the vicinity of Lee Canyon or the mouth of Coyote Creek (Walters 1938:73; Spier 1936). This lower stretch of the Okanogan that the Sinkaietk occupied was known as nūqaīē'tkū, which translates as "water that does not freeze" (Spier 1936:10). The Northern Okanagan and the Upper Similkameen bands occupied villages along the Similkameen River, Lake Osoyoos, and the Okanogan River. Several of the Upper Similkameen villages were occupied as recently as 1904 during Teit's research (Boas and Teit 1930:169).

Ethnographies indicate the presence of numerous winter villages along all the major waterways. Sinkaietk and Northern Okanagan villages were typically located along a major stream. Walters (1938) presented information regarding the locations of villages organized by band. The Tukoratum band had "winter sites from Condon's Ferry on the Columbia to the mouth of the Okanogan River and up the Okanogan River to about four miles above Monse" (Spier 1936:10; Walters 1938:86) "The Kartar band have winter sites from the foot of Omak Lake to the Columbia River" (Spier 1936:10; Walters 1938:86). He continues "the Konkonelp band have winter sites from about three miles above Malott to the turn of the Okanogan River at Omak" while the Tonasket band occupied territory "from Riverside upstream to Tonasket (Spier 1936:11; Walters 1938:86). Directly north of the Tonasket band of Sinkaietk were the Inkamip band of the Northern Okanagon. The Inkamip wintered in the vicinity of Lake Osoyoos (Walters 1938:86). Boas and Teit (1930:169) specify that no list of villages or camps for the Northern Okanogan were obtained for locations south of the American / Canadian border.

Numerous collections of published legends were consulted to identify points of mythological significance on or near the Project Area. These include publications by Edmonds and Clark (1989), Clark (1969), Erdoes and Ortiz (1984), Judson (1910), Hill-Tout (1978), and Yanan (1971). Clark (1969:97) relates a story wherein Coyote created a "waterfall in the Okanogan River because the girls there would not marry him." This may be McLoughlin Falls at river mile 49 on the Okanogan River, approximately 28 miles southwest of the Project Area. Clark (1969:114-116) describes the legend of the Hee-Hee Stone as representing a woman who had spoken sharply to Coyote following a dispute between three brothers that were enamored with her. The stone was a place of offerings "for perhaps hundreds of years" for people passing by. People believed that if they gave offerings, their wishes may come true and they would have good luck (Clark 1969:114). The Hee-Hee Stone is located about 4.8 miles east by west by northwest of the Project Area.

The Project Area lies within the north portion of the Colville Reservation that was "restored" to public settlement. As such, the region surrounding the Project Area is dotted with Indian Allotments that were granted to persons who had inhabited locations prior to restoration. Nearby allotments include five along Myers Creek between the Project Area and the Canadian border that are marked on the Chesaw (1988) USGS topographical map. Not marked on the topographical map, though, is an allotment that is immediately south of the subject property. This is a 160 acre allotment (number C-42 & C-43; N½, SW¼, S½, Section 4, T39N, R30E) that belongs to Mary and Andrew Josephs.

EXPECTED PROPERTIES

Based upon the prehistoric and historic overview of the region, it is reasonable to expect certain types of cultural resources to be potentially present on or near the Project Area. Conversely, there is little expectation that some types of cultural resources will be present. Following is a list of the historic themes and time periods that might be expected:

Theme		Time Period
[X] Prehistoric Archaeology	[ ] Military	[X] Prehistoric
[X] Agriculture	[X] Mining Industry	[X] Historic Native American
[X] Architecture	[X] Native Americans	[X] Exploration: 1805-1860
[ ] Civilian Conservation Corp.	[ ] Politics/Government	[X] Settlement: 1855-1890
[ ] Commerce	[X] Public Land Mngt	[X] Phase I Statehood: 1890-1904
[ ] Communication	[ ] Recreation/Tourism	[X] Phase II Statehood: 1904-1920
[X] Culture and Society	[X] Settlement	[X] Interwar: 1920-1940
[X] Ethnic Heritage	[X] Timber Industry	[X] Pre-Modern: 1940-1958
[X] Exploration/Fur Trapping	[ ] Transportation	[X] Modern: 1958-present
[X] Industry	[ ] Reclamation	

FIELD METHODS

Survey of the Project Area was done by David Harder and Paul Harder on August 9 and 10, 2003. The weather was warm with clear skies providing adequate light for survey. Initially, a tour of the Project Area was provided by Mr. Jon Winter. He showed locations where specific impacts were proposed and the affects of those impacts were discussed.

Survey of the property was done with pedestrian transects that continued along a set course. During survey, a surveyor walks within their transect space and visually inspects the ground surface and any exposures for evidence of historic resources. The majority of the survey was done with 20 to 30 meter transect spacing. When the ground slope exceeded 30 degrees, the transect spacing was increased to about 45 meters. Areas of low density coverage are highlighted in Figure 2. The ground survey was initiated with one set of transects that circumscribed the Project Area (Figure 2). The central portion of the Project Area was surveyed with a mix of linear and topographic transects along steep topography. The different survey areas, shown in the inset of Figure 2, were designated as: Area A, the flatter topography to the west and southwest of the steep slopes of the bowl (Figure 3); Area B, the bowl (Figure 4); and Area C (Figure 5), the remainder of the Project Area that lies to the south and southeast of the bowl.

Area A was covered with north/south transects. The southern end of Area A was completed with east/west transects. Area B was covered with transects that follow the topographic contours. These transects began at the top of the bowl and continued inward to the center. Area C was covered with transects that trended northeast/southwest along the eastern edge of the property.

Figure 3. View north across Area A.

Figure 4. Composite photograph of Area B looking southwest and west.

Figure 5. View northwest across Area C.

PROJECT RESULTS

The file search at the SHPO office did not reveal the presence of any archaeological resources, historic properties, historic buildings, or historic districts on the APE or in the immediate vicinity of the Project Area.

During the survey several locations of recent human activity were discovered. These locations were observed and noted, but not recorded as sites due to their nature as recent manifestations of use in the Project Area. These locations of activities are marked with numbers on the inset of Figure 2.

- Location 1 is an existing weekend getaway camp that includes several recreational vehicles and associated items.
- Location 2 comprises recent debris including plastic, wood, metal, and automotive items, and two small "forts" or "hideaways" utilizing natural and disposed of debris for building materials.
- Location 3 is an intermittent elk camp and storage location.
- Location 4 is an abandoned camp amongst a copse of trees–this camp includes a bench set into notches cut into two large trees.
- Location 5 has been used as a campsite and includes several pieces of recent debris and plastic toys–this location is under a lone pine and is also heavily disturbed by cattle.
- Location 6 is a campsite that has been utilized within the last ten years. Present at this location is a rock fire ring and a few remaining pieces of wood.
- Location 7 is a debris pile of lumber and metal that also includes a liquor bottle and an oil bottle.

No prehistoric or historic cultural materials, artifacts, or features were observed during ground reconnaissance survey of the property. Finally, the aesthetic impact of the project was considered. The file search did not reveal the presence of any historic buildings or districts in the vicinity. No potentially historically significant structures were visible from the Project Area. During survey, the surrounding landscape was observed to evaluate the aesthetic impacts. According to Mr. Winter, the Project Area is planned to be utilized for the proposed project for less than 10 years. At the end of this period of time, the locations that have been impacted will be reclaimed through replanting of native vegetation. Aesthetically, this project will have no impact on any historic resources. Physically, no historic resources will be impacted.

RECOMMENDATIONS AND MANAGEMENT PLAN

No further archaeological investigation or work is recommended prior to or during execution of the proposed Crown Resources Corporation project on the Project Area. Although no cultural resources were noted during the field investigation, the potential still exists that undetected resources are present. If ground disturbing activities during the project do reveal any cultural materials, excavations should cease and the Washington State Archaeologist at the Office of Archaeology and Historic Preservation (OAHP) should be notified immediately.

If human remains are encountered during the project, operations should cease immediately in accordance with Washington State statutes RCW 27.44. The area around the discovery should be secured and the County Coroner and the State Archaeologist at the OAHP should be contacted immediately.

WORKS CITED

Alt and Hyndman

1984 *Roadside Geology of Washington*. Mountain Press Publishing Company, Missoula, Montana.

Ames, Kenneth M., and Alan G. Marshall

1980 Villages, Demography, and Subsistence Intensification on the Southern Columbia Plateau. *North American Archaeologist* 2:25-52.

Anastasio, Angelo

1972 The Southern Plateau: An Ecological Analysis of Intergroup Relations. *Northwest Anthropological Research Notes* 6:109-202.

Beckham, Stephen D.

1998 History Since 1846. In *Handbook of North American Indians: Plateau*, v.12, pp.149-173, Smithsonian Institution, Washington.

Boas, Franz and James Teit

1930 *Coeur D'Alene, Flathead and Okanogan Indians*. Forty-fifth Annual Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institute, 1927-1928. United States Government Printing Office, Washington.

Bohm, Fred C. and Craig E. Holstine

1983 *The People's History of Stevens County*. Stevens County Historical Society, Colville, Washington.

Boyle, Matthew

2003 *Buckhorn Mountain Project, Plant Survey and Habitat Report*. Grette Associates, Tacoma, Washington. Report prepared for Crown Resources Corporation, Oroville, Washington.

Burt, William H. and Richard P. Grossenheider

1961 *A Field Guide to the Mammals*. The Peterson Field Guide Series, Houghton Mifflin Company, Boston, Massachusetts.

Chatter, James C. and Matthew W. Zweifel

1987 *The Cemetery at Sntl´exnwenewixwtn. Okanogan County, Washington*. Archaeological Report Number 87-1. Central Washington Archaeological Survey, Central Washington University, Ellensburg.

Clark, Ella Fitzgerald

1969 *Indian Legends of the Pacific Northwest*. University of California Press, Berkeley.

Dalquest, Walter W.
1948 *Mammals of Washington*. Museum of Natural History, University of Kansas Press, Lawrence.

Daubenmire, Rexford
1988 *Steppe Vegetation of Washington*. Washington State University Cooperative Extension, Pullman.

Daubenmire, Rexford and Jean B. Daubenmire
1968 *Forest Vegetation of Eastern Washington and Northern Idaho*. Washington Agricultural Experiment Station, Pullman.

Edmonds, Margot and Ella E. Clark
1989 *Voices of the Winds : Native American Legends*. New York : Facts on File Publications.

Eller, Terry K.
1980 *A Report of the Archaeological Survey of the Oroville Pit Site, PS-U-309, and Stockpile Site, SP-U-23133, Okanogan County, Washington.* Submitted to the Department of Transportation. Washington Archaeological Research Center, Progress Report No. 103, Washington State University.

Erdoes, Richard and Alfonso Ortiz
1984 *American Indian Myths and Legends*. Pantheon Books, New York.

Hicks, Brent A. with contributions by Joy Handley
1996 *A Traditional Cultural Property Study of the proposed Crown Jewel project Site in North-Central Washington*. Colville Confederated Tribes Department of History and Archaeology Report. Prepared for Battle Mountain Gold Company.

Hill-Tout, Charles
1978 *The Salish People: Volume 1, The Thompson and the Okanagan*. Talonbooks, Vancouver, Canada.

Judson, Katharine Berry
1910 *Myths and Legends of the Pacific Northwest, Especially of Washington and Oregon*. A.C. McClurg, Chicago.

Lohse, Ernest S., and Deborah Sammons-Lohse
1986 Sedentism on the Columbia Plateau: A Matter of Degree Related to the Easy and Efficient Procurement of Resources. *Northwest Anthropological Research Notes* 20:115-136.

Lothson, Gordon
1977 *Archaeological Reconnaissance and Phase II Testing of Oroville Urban Levees.* Washington Archaeological Research Center, Progress Report No. 52, Washington State University.

National Register Bulletin #38
1990 *Guidelines for Evaluating and Documenting Traditional Cultural Properties.* U.S. Dept. of the Interior, National Park Service, Interagency Resources Division.

Nelson, Charles M.
1973 Prehistoric Culture Change in the Intermontane Plateau of Western North America. In *Explanation of Culture Change: Models in Prehistory*. edited by C. C. Renfrew, pp. 371-390. Gerald Duckworth, London.

Osborne, Douglas
1949 *The Archeological Investigations of Two Sites in the McNary Reservoir*. Columbia Basin Project, River Basin Surveys, Smithsonian Institution.

Pokotylo, David L. and Donald Mitchell
1998 Prehistory of the Northern Plateau, In *Handbook of North American Indians: Plateau*, v. 12, pp. 81-102, Smithsonian Institution, Washington.

Ray, Verne F.
1933 *The Sanpoil and Nespelem: Salishan Peoples of Northeastern Washington.* University of Washington Press, Seattle.
1939 *Cultural Relations in the Plateau of Northwestern America.* AMS Press, New York.
1942 *Cultural Element Distributions: XXII Plateau.* Anthropological Papers 8:2. University of California Press, Berkeley.

Reid, Kenneth C., John A. Draper and Deborah L. Olson
1990 *Excavations at Ellisford (45OK706) in the Oroville-Tonasket Unit Extension, Chief Joseph Project, Okanogan County, North Central Washington*. Center for Northwest Anthropology, Project Report No. 10, Washington State University, 1990.

Schalk, Randall F.
1977 The Structure of Anadromous Fish Resource. In *For Theory Building in Archaeology*, edited by L. R Binford, pp. 207-249. Academic Press, New York.

Smith, Allan H.
1988 *Ethnography of the North Cascades*. Project Report No. 7, Center for Northwest Anthropology, Washington State University, Pullman.

Spier, Leslie
1936 Tribal Distribution in Washington. *General Series in Anthropology, No. 3. Contributions from the Laboratory of Anthropology, 2*. Santa Fe, New Mexico. George Banta Publishing Co., Menasha, Wisconsin.

Uebelacker, Morris L.
1978 *Cultural Resource Overview of the Tonasket Planning Unit*. Report prepared for the Okanogan National Forest, Okanogan, Washington.

Walker, Deward E., Jr. and Roderick Sprague
1998 History Until 1846, in *Handbook of North American Indians: Plateau*, v. 12, pp. 138-148, Smithsonian Institution, Washington.

Walters, L. V. W.
1938 Social Structure. In The Sinkaietk or Southern Okanagon of Washington, edited by Leslie Spier, pp.71-101. *General Series in Anthropology, No. 6. Contributions from the Laboratory of Anthropology, 2*. Santa Fe, New Mexico. George Banta Publishing Co., Menasha, Wisconsin.

Western Regional Climate Center
2003 http://www.wrcc.sage.dri.edu/summary/climsmwa.html

Wilson, Bruce A.
1990 *Late Frontier: A History of Okanogan County, Washington 1800-1941*. Okanogan County Historical Society, Okanogan, Washington.

Yanan, Eileen
1971 *Coyote and the Colville*. Published by the St. Mary's Mission, Omak, Washington.